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10/542,013	03/06/2006	Jun Fujita	124698	8147

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EXAMINER	
SCHATZ, CHRISTOPHER T	
ART UNIT	PAPER NUMBER
1747	

NOTIFICATION DATE	DELIVERY MODE
06/02/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction27049@oliff.com
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Office Action Summary	Application No.	Applicant(s)	
	10/542,013	FUJITA ET AL.	
	Examiner	Art Unit	
	CHRISTOPHER SCHATZ	1747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 March 2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,7-9 and 11-13* is/are pending in the application.

4a) Of the above claim(s) *7-9* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,8 and 11-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

FINAL REJECTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art in view of Armstrong (US 2001/0000165), and either of the Derwent abstract of JP-63188039 ('039) or the Derwent abstract of JP-60127385 ('385).

The Applicant's Admitted Prior Art discussion discloses a method of manufacturing a honeycomb structure 3 having honeycomb segments 2 of a prism shape provided with numerous circulation holes (specification, page 2, lines 7-13), the method comprising: a masking step of attaching masking materials to both end surfaces of the honeycomb segments (specification, page 2, lines 14-16); a stacked body bonding step of bonding the honeycomb stacked body by bonding the plurality of honeycomb segments together while interposing adhesive layers therebetween (page 2, lines 17-20); an adhesive layer drying step of integrally fixing the honeycomb stacked body by heating and drying the adhesive layers (page 2, lines 21-24); a masking material separating step of separating the masking materials (page 2, line 30 – page 3, line8); a grinding step of grinding an outer peripheral portion of the honeycomb stacked

body into a predetermined shape (page 2, lines 25-29); a coating material 4 applying and drying step of forming a coating material layer by applying a coating material to the outer peripheral portion of the honeycomb stacked body and then drying the coating material layer (page 2, lines 25-29); wherein at least the outer peripheral portion of the end surface of the honeycomb segment is covered with masking material; and an adhesive member comprising a base sheet and a sticky agent attached to one side of the sheet wherein the adhesive member is bonded to the end surface of the honeycomb segment through the sticky agent.

It is not clear if Applicant's Admitted Prior Art discloses grinding after the masking material separating step.

Armstrong discloses a method of using a grinding tool to grind and finish several different types of surfaces (paragraph 0001). Armstrong further discloses that when using said grinding tool is used to grind said surfaces, the abrasive surface of the grinding tool becomes degraded with adhesive and/or glue over time (paragraph 0019). One of ordinary skill in the art reading such would have recognized that the grinding tool used to grind the honeycomb stacked body would become degraded with adhesive if grinding occurs when the masking material is still on the honeycomb stacked body because the adhesive used to attach said masking material would contaminate the grinding tool. Therefore, at the time the invention was made it would have been obvious to one of ordinary skill in the art to modify the method of the Applicant's Admitted Prior Art by removing the masking material before grinding in order to prevent the grinding tool from becoming contaminated with adhesive as taught by Armstrong above.

Applicant's Admitted Prior Art does not disclose a method wherein the base sheet is made of a heat shrinkable material which shrinks by heat in the adhesive layer drying step. However, both '039 on '385 disclose a masking film comprising a sticky agent that adheres to a surface to be protected. When the masking film is to be removed, the film is heat-shrunk in order to ease the removal of the film. At the time the invention was made it would have been obvious to one of ordinary skill in the art to modify the method of Applicant's Admitted Prior Art as modified by Armstrong such that the base sheet is made of a heat shrinkable material which shrinks by heat in the adhesive layer drying step as such a modification would make the removal of said masking material easier as taught by '039 or '385.

As to claim 11, the stacked body bonding step is preformed after the masking step (page 2, lines 14-20). As to claim 12, the masking material is removed after drying (page 2, line 21 – page 3, line 8). As to claim 13, the coating is applied after grinding.

3. Claims 1 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over by JP 2002-126421 (Norihiko) in view of Armstrong and either of the Derwent abstract of JP-63188039 or the Derwent abstract of JP-60127385.

'421 discloses a method of manufacturing a honeycomb structure 3 having honeycomb segments of a prism shape provided with numerous circulation holes, the method comprising: a masking step of attaching masking materials to both end surfaces of the honeycomb segments; a stacked body bonding step of bonding the honeycomb stacked body by bonding the plurality of honeycomb segments together while

interposing adhesive layers therebetween; an adhesive layer drying step of integrally fixing the honeycomb stacked body by heating and drying the adhesive layers; a masking material separating step of separating the masking materials; a grinding step of grinding an outer peripheral portion of the honeycomb stacked body into a predetermined shape; a coating material 13 applying and drying step of forming a coating material layer by applying a coating material to the outer peripheral portion of the honeycomb stacked body and then drying the coating material layer; wherein at least the outer peripheral portion of the end surface of the honeycomb segment is covered with masking material; and an adhesive member comprising a base sheet and a sticky agent attached to one side of the sheet wherein the adhesive member is bonded to the end surface of the honeycomb segment through the sticky agent (sections 8-10, 13-15, figures 1, 2, 4). It is not clear if '421 discloses grinding after the masking material step.

Armstrong discloses a method as discussed above. At the time the invention was made it would have been obvious to one of ordinary skill in the art to modify the method of '421 by removing the masking material before grinding in order to prevent the grinding tool from becoming contaminated with adhesive as taught by Armstrong above.

'421 does not disclose a method wherein the base sheet is made of a heat shrinkable material which shrinks by heat in the adhesive layer drying step. '039 and '385 disclose a method as discussed above. At the time the invention was made it would have been obvious to one of ordinary skill in the art to modify the method of '421 as modified by Armstrong such that the base sheet is made of a heat shrinkable

material which shrinks by heat in the adhesive layer drying step as such a modification would make the removal of said masking material easier as taught by '039 or '385.

As to claim 11, the stacked body bonding step is preformed after the masking step. As to claim 12, the masking material is removed after drying. As to claim 13, the coating is applied after grinding (see above cited paragraphs)

4. Claims 1 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over by JP 2002-126427 in view of Armstrong and either of the Derwent abstract of JP-63188039 or the Derwent abstract of JP-60127385.

'427 discloses a method of manufacturing a honeycomb structure 3 having honeycomb segments 2 of a prism shape provided with numerous circulation holes 31, the method comprising: a masking step of attaching masking materials to both end surfaces of the honeycomb segments (section 13 of machine translation); a stacked body bonding step of bonding the honeycomb stacked body by bonding the plurality of honeycomb segments together while interposing adhesive layers therebetween (section 13); an adhesive layer drying step of integrally fixing the honeycomb stacked body by heating and drying the adhesive layers (section 13, 34); a masking material separating step of separating the masking materials (section 20); a grinding step of grinding an outer peripheral portion of the honeycomb stacked body into a predetermined shape (sections 35-40); and a coating material 4 applying and drying step of forming a coating material layer by applying a coating material to the outer peripheral portion of the honeycomb stacked body and then drying the coating material layer; wherein at least the outer peripheral portion of the end surface of the honeycomb segment is covered

with masking material; and an adhesive member comprising a base sheet and a sticky agent attached to one side of the sheet wherein the adhesive member is bonded to the end surface of the honeycomb segment through the sticky agent (sections 13, 35-40; figures). It is not clear if '427 discloses grinding after the masking material step.

Armstrong discloses a method as discussed above. At the time the invention was made it would have been obvious to one of ordinary skill in the art to modify the method of '427 by removing the masking material before grinding in order to prevent the grinding tool from becoming contaminated with adhesive as taught by Armstrong above.

'427 does not disclose a method wherein the base sheet is made of a heat shrinkable material which shrinks by heat in the adhesive layer drying step. '039 and '385 disclose a method as discussed above. At the time the invention was made it would have been obvious to one of ordinary skill in the art to modify the method of '427 as modified by Armstrong such that the base sheet is made of a heat shrinkable material which shrinks by heat in the adhesive layer drying step as such a modification would make the removal of said masking material easier as taught by '039 or '385.

As to claim 11, the stacked body bonding step is preformed after the masking step (sections 13 and 20). As to claim 12, the masking material is removed after drying (section 20). As to claim 13, the coating is applied after grinding (sections 35-40)

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over '421, Armstrong and '039 or '385, as applied to claim 1 above, and further in view of Rowland (US 5535355).

‘421, Armstrong, '039 and '385 disclose that masking material is removed from the end of the honeycomb segment, but it is not clear if the reference discloses a method wherein the masking material is subjected to brushing during the masking material removing step. Rowland discloses a method of removing a material adhered to a surface via an adhesive, wherein said material layer is subjected to brushing during the material layer removing step. At the time the invention was made it would have been obvious to one of ordinary skill in the art to modify the method of ‘421, Armstrong, '039 and '385 by subjecting the masking material to brushing during the removal step as taught by Rowland above as doing such is an efficient method of removing adhesive bound layers from surfaces (column 2, lines 32-29).

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over ‘427, Armstrong, '039 and '385, as applied to claim 1 above, and further in view of Rowland (US 5535355).

‘427, Armstrong, '039 and '385 disclose that masking material is removed from the end of the honeycomb segment, but it is not clear if the reference discloses a method wherein the masking material is subjected to brushing during the masking material removing step. Rowland discloses a method of removing a material adhered to a surface via an adhesive, wherein said material layer is subjected to brushing during the material layer removing step. At the time the invention was made it would have been obvious to one of ordinary skill in the art to modify the method of ‘427, Armstrong, '039 and '385 by subjecting the masking material to brushing during the removal step as

taught by Rowland above as doing such is an efficient method of removing adhesive bound layers from surfaces (column 2, lines 32-29).

Response to Arguments

7. Applicant's arguments filed 03/17/2011 have been fully considered but they are not persuasive.

The applicant states that Armstrong does not disclose grinding several types of surfaces. Paragraph 0001 directly contradicts applicant's assertion. Applicant should further note that Armstrong is cited by the examiner to demonstrate that it is a known problem in the art that when grinding a material with glue or resin, said glue or resin will contaminate and degrade the abrasive quality of a grinding belt.

The applicant argues that the examiner makes a leap from Armstrong's disclosure that glue or resin will contaminate and degrade the abrasive quality of a grinding belt to asserting that it would have been obvious to remove the masking material prior to a grinding step of a honeycomb filter. The applicant then states that Armstrong does not disclose such. With respect to the applicant, the examiner makes no such leap. Rather, the examiner expressly states that one of ordinary skill in the art in possession of Applicant's Admitted Prior Art and Armstrong would have recognized that the grinding tool used to grind the honeycomb stacked body would become degraded with adhesive if grinding occurs when the masking material is still on the honeycomb stacked body because the adhesive used to attach said masking material would contaminate the grinding tool. Thus, one of ordinary skill in the art would have

readily recognized to modify the method of the Applicant's Admitted Prior Art by removing the masking material before grinding in order to prevent the grinding tool from becoming contaminated with adhesive as taught by Armstrong above.

Applicant argues that Armstrong discloses an alternate solution to the contamination of the abrasive surface. The applicant should note that Armstrong's disclosure of an alternate solution does not make the solution of removing the masking material before grinding non-obvious. Additionally, Armstrong's solution only allows the grinding belt to be reused a finite number of times (paragraph 0025 of Armstrong).

Applicant's arguments with respect to the '039 and '385 references are not commensurate with the scope of the applicant's claim since the claim says nothing about reducing the adhesive quality of a masking material during the drying step.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER SCHATZ whose telephone number is (571)272-6038. The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571)272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHRISTOPHER SCHATZ/
Examiner, Art Unit 1747

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